Caregiver impact on cattle health, performance and well-being

Tom Noffsinger, DVM and Lucy Morrissey

Benkelman, NE 69021

Animal well-being is founded on positive interactions and building trusting relationships between caregivers and cattle. Trusting relationships between animals and caregivers result in positive performance levels providing the foundation for a holistic system which benefits the whole internal supply chain i.e., from conception to harvest.

The positive effect of handling livestock with methods based on handler understanding of cattle behavior inclusive of acclimation and exercise techniques is seen predominately in qualitative measures resulting in quantitative results in health and performance.

Every human intervention such as calving, processing, weaning, pasture rotation, transportation and address change is an opportunity to build cattle confidence, health, performance and well-being.

Hypothesis

- Cattle that are exposed to positive human interaction present confidence in showing true health and well-being indicators. One of the requirements for successful treatment responses to BRD and lameness issues is early detection of cattle abnormalities. Cattle that have distrust of handlers will hide early signs to avoid predator detection. Cattle that trust caregivers are willing to show signs of lameness or loss of respiratory efficiency very early in disease, allowing for early treatment, fast recovery, and minimal loss of production.
- Cattle that have confidence in human presence are more willing to be guided through husbandry requirements such as processing, sorting and pen moves. Cattle need to be trained to move single file and they need to know that they can walk by handlers without harm.
- Give the cattle time, and the cattle will yield time back with voluntary flow. When we take the time to introduce cattle to their new environment through positive interaction and guidance toward what they need, their performance will repay us.
- Encouraging innate animal and herd behaviors such as exercise, supports the establishment of herd hierarchy and positive comingling, sets routine behaviors and consistent daily routine for key performance influencers such as eating, drinking, resting and playing.
- Human intervention during a period of change, where a caregiver assists animals to acclimate, will greatly benefit the timeline in which it takes the animal to reach consistent and high performance. A period of change varies in cause and effect and can be as simple as a ration change or pen move, or a more dramatic stressor such as weaning and relocation from ranch to a feedyard in different geographical locations.
- Handlers can interact with an animal's curiosity to develop a leadership position, then guide the animal through the required actions; first impressions count. Cattle remember the interactions they have with humans being either positive or negative; every interaction can be a positive interaction, regardless of the action. Be willing to lead newly arrived cattle from the scale or unloading area to their new home, and everywhere in between.
- Even at a distance, our eye pressure and its subsequent impact is not to be underestimated. An animals survival instinct is founded on its ability to identify a threat and react accordingly. Override your predator instincts, your behavior will result in an animal responding positively to your interaction rather than react and flee or behave defensively.
- Holding cattle tight promotes a defensive prey animal feeling of bunching together to protect one another from environmental threats, encouraging their flight and flight behaviors. Don't crowd cattle, respect their personal space both with your presence and other animals.
- An animal confident in its surroundings will demonstrate free approach to the bunk and feed source, will demonstrate sentient being behaviors such as socializing, intentional exercise and play – all examples of well-being that ensure a highly functioning immune system, healthy digestive system, and constructive ability to deal with minor stressors, returning to a normal and positive state of mind in a timely manner. Reduction of cortisol release induced by hypothalamic influence on adrenal glands is critical to eliminate immunosuppression induced by anxiety. Simple cattle behaviors that send hypothalamic signals to adrenal glands to secrete hormones like dopamine, serotonin, vasopressin, oxytocin and norepinephrine instead of cortisol include simple cud chewing and expression of exuberance or play.

Methodologies of effective productive stockmanship

- Purpose – Position – Posture: Approach cattle with a clear purpose. Proper position is the key to success and will change every second; correct position involves handler distance, direction, posture, angles and speed.
- Energy – Momentum – Direction: Adjust handler energy to fit cattle sensitivity and previous handling experiences.
- Applying pressure in a way that sets the animal up for success: Stimulus and release/reward is the key to creating voluntary cattle flow. Proper timing of release, rewarding desired movement is monumental to building cattle confidence. Handler presence is the first level of pressure; respect and awareness are key.

- Work on the individual animal to influence the herd: Learn to communicate with influential cattle in the herd—observe the herd to identify those with robust requests for guidance.
- Be consistent in handler attitude: Handlers with a consistent, positive, confident attitude will achieve high performance through building trust.
- Reward the slightest try: Perfection is not instantaneous; handler patience and confidence will yield perfection.
- Encourage voluntary flow, avoid fear motion: Require cattle to move with purpose because they want to not because they are forced to.
- Stay out of the blind spot: Avoid being behind cattle, appreciate the peripheral visual field of prey creatures; utilize the edge of the animal's blind spot to encourage a direction change – they don't want to lose sight of you! Cattle crave to see you simultaneously with their destination, want to go half around you and travel straight.
- The point of balance is the eye, not the shoulder: Balance your working position off the eye. Cattle can sense pressure directed at all locations on the globe of the eye.
- Introduce yourself to the left eye of cattle during an initial meeting: Optic nerves cross so images from the left eye travel to the right brain that is less reactive or more cognitive than the left brain. Range cattle or sensitive cattle are easier to handle from the left side.
- Work the lead, from the front: Be available to the visual field of cattle, keep their mind directed toward the desired destination.
- Understand the difference between flight zones and working zones: Proper stock handlers expect cattle to "work" for them not flee. Correct position, distance and attitude draws cattle to the handler. Expect the working zone to continually decrease as cattle gain confidence.
- Cattle are very sensitive to handler movement direction: Handler motion parallel to herd movement stops cattle motion. Handler motion against herd movement speeds cattle flow. Handler motion away from herd flow continues motion; be willing to go wide.
- Control the cattle foot speed with the rate of movement of your feet: Rhythm, cadence and harmony are essential to gain cattle trust. Handlers need to maintain foot or horse feet speed at the desired rate. Cattle will imitate that step rate.
- Show the animal what you want it to do: Offer nonverbal guidance. Look where you want cattle to go; they share and follow handler vision.
- Portray confidence to build confidence: Know that success will happen with a confident, cohesive work team that understands their purpose.
- Give the animal time to make the right decision: Sensitive cattle that stop and request guidance require up to 7 seconds to change their minds the first time. That time requirement shortens with each sequential request.
- Override your innate predator instincts: Handlers can adjust their posture and visual pressure to be less predatory. Handlers should avoid standing still; gentle handler movements allow cattle to sense handler distance and location.
- Let the animal see the source of pressure and where you want it to go in unison: Cattle have slow focus, poor depth perception but good ability to sense motion.
- Cattle want to return to where they have come from: Use this tendency to create voluntary cattle flow through holding pens and Bud Box facilities. Cattle tend to exit pens through the gate in which they arrived.
- Take 2 to send 5, take 10 to send 100: When bringing drafts of cattle to a tub or bud box, rather than walking by 5 cattle, be willing to send the first 2 with purpose and simply step back 2-4 steps to draw and allow space for followers. This movement entices waiting cattle to want to go next rather than being crowded back into a check gate.
- There's pride in one's ability to change the plan: Offer new instruction to an animal and a group of handlers in order to achieve the same goal.

Conclusion

Cattle that experience consistent positive and mutually respectful stockmanship handling throughout their lifecycle, and guidance through environmental changes, will achieve measurable high performance in a timely manner and achieve such performance with minimal expectation of outliers. This performance expectation does not rest solely on the animal, however, also on the skillset, mindset and commitment of the caregivers. There is a profound connection between human interaction, animal stress levels and relative immunosuppression, contributing to either positive or negative performance results through less susceptibility to disease and infection.

